CHAPTER 1 INTRODUCTION

1-1. Purpose and scope.

This manual establishes criteria for guidance of Corps of Engineers personnel in the planning and design of proposed military ports. It includes site selection and evaluation, layout of harbor facilities, coastal protection methods, pier and wharf layout and design, fender systems, mooring devices, dockside utilities, and cargo handling facilities. Based on current trends in the shipping industry, it is anticipated that up to 90 percent of all cargo arriving in future Theaters of Operation (TO) will be by containers. Basic considerations in container terminal design, storage and marshalling areas, and container handling facilities are also included. This manual does not apply to ammunition-loading terminals.

1-2. Changes.

Users of this manual are encouraged to submit recommended changes or comments to improve it. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons should be provided for each comment to ensure understanding and complete evaluation. Comments should be prepared using DA

Form 2028 (Recommended Changes to Publications) and forwarded direct to HQDA (DAEN-ECE-G) WASH DC 20314-1000.

1-3. Justification.

A new port or new facilities for an existing port will be justified by:

- a. The inability of existing facilities to handle the flow of materials.
 - b. Shortening or improving transportation routes.
- c. The necessity for disposal of key military transportation establishments.

1-4. General design principles.

A high percentage of the cost of ship operation is due to ship time in ports. The design of ports shall take into consideration trends in ship design, locations for transit storage, adequacy of access by rail and highway, and types and capacities of cargo handling equipment. The size and capacity of the installation will be determined by a study of the volume and classes of cargo and the availability of labor and construction materials.